

# RFDS 2.00 ACCESS

General Access Requirements: see the C.D.G. 20 D 210.20, Appendix 20 D-3 (12/00 edition), and Redmond Municipal Code 18.06.

## 2.1; FIRE APPARATUS ACCESS

## 2.1.1: DESIGN CRITERIA:

- **2.1.1.1** Emergency vehicle access roadways shall have a minimum unobstructed width of 20 feet.
- **2.1.1.2** Where access exceeding 50 feet is needed to one or two dwelling units, a reduction to an unobstructed width of 14 feet (and in some cases 12 feet) is allowed, if an approved 20' x 50' emergency vehicle operations area (EVOA) is provided.
- 2.1.1.3 Roadways shall have an all-weather driving surface per City of Redmond standards. It shall be in place and able to support the weight of fire department vehicles as determined by City of Redmond Engineering construction inspectors (phone: 556-2725) prior to the delivery, use, or storage of combustible building materials to or at the site except small amounts used for concrete forms. Approved alternate surfaces shall be installed to a minimum of manufacturers specifications and City of Redmond Standard details.
- **2.1.1.4** All turns shall have a minimum 25-foot interior turning radii, 45-foot exterior turning radii. Some turnaround designs may require a 28-foot radius entering or exiting the turnaround. See details in CDG appendix 20 D-3.
- **2.1.1.5** Roadways must be within 150 feet of all portions of the exterior wall of a building.
- **2.1.1.6** Roadways must be within 50 feet of at least 25% of the exterior wall of a building.
- **2.1.1.7** Fire lanes shall be located wherever curbs, road edges, or loading areas are adjacent to the 20 foot wide vehicle access roadway.
- 2.1.1.8 The emergency vehicle access roadway shall have a maximum grade of 10%. If off site access grades or on site grades are 11% or more, a design (plan and profile) of the proposed roadways must be submitted during Technical Committee review showing the extent and degree of overage in order to determine the mitigation which may be required. If the access grade is 10% or over, all structures shall be sprinklered. Additional mitigation may also be necessary. In some cases adequate mitigation may not be possible and proposed lots may be designated as "unbuildable".
- 2.1.1.9 Dead ends shall be no longer than 150 feet or provide a turnaround per City of Redmond standards. When three or more dwelling units are served by dead end access longer than 150' measured from the closest intersection (near gutter line, perpendicular to the dead end access), or when one or two dwelling units are served by dead end access longer than 300' there shall be provided a turnaround per City of Redmond standards.
- 2.1.1.10 Where more than 50 units are designed in a residential development, either single family, multifamily, retirement or similar, there shall be a minimum of two access points to the street system. Such access points shall be so located so as to provide for general circulation, alternate emergency vehicle access routes, through access and general area transportation design considerations. One of these access points may be for emergency vehicle use only where the number of units does not exceed 100. The Technical Committee and the Redmond Fire Department shall approve access locations. Design of an "emergency vehicle use only" access must be approved by the Fire Department. Where non-emergency obstruction of the access is desired, a gate shall be required and shall be a strobe-activated electric gate(s) with key and manual overrides, and must have the approval of the Redmond Fire Marshal.



- **2.1.1.11** Distances to and around buildings shall be measured along the center line of access roads. In determining the placement of access roads the dimension around a building shall be measured at a distance of no closer than 10 feet to the structure (1/2 the minimum width of the fire access roadway).
- 2.1.1.12 The design for any bridge or structure to be used for emergency vehicle access shall be approved by the City of Redmond Engineering Department (for a minimum 70,000 pound load). Driving surfaces that are **not** designed to support the weight of emergency vehicles shall be conspicuously signed and/or gated in an approved manner.
- **2.1.1.13** Fire Lane marking is not required where marked parking stalls are adjacent to the Fire Lane.

#### 2.1.2: FIRE LANES:

- **2.1.2.1** Marking: Generally a fire lane shall be identified wherever curbs, road or street edges, or loading areas are adjacent to the vehicle access roadway.
- 2.1.2.2 Fire lanes identified through site plan review shall be included on civil drawings.
- **2.1.2.3** Additional fire lanes, marking, or re-marking may be required anytime during the life of the development upon evaluation by and direction of the Fire Marshal.
- 2.1.2.4 Fire apparatus access roadways shall be marked in order to identify their required location and width. Marked fire access roadways, or "Fire Lanes", may be established at the time of plan review, pre-construction site inspection, and/or post construction site inspection, as well as any time during the life of the occupancy. Proposed fire lane location must obtain approval of the Fire Marshal, and shall be marked as directed with one or more of the following types of marking. Where paint is designated, it shall be 'safety yellow'.

#### Type 1 – Painted Curb

Vertical curbs shall be painted on the top and side, extending the length of the designated fire lane. Type 1 marking of a rolled curb may be with a minimum 6 inch painted stripe on the top most part of the curb.

### Type 2 – Pavement Lettering

Pavement adjacent to designated curbs, edge, or line shall be painted with 18" tall block letters having a minimum 3" wide stroke and shall spell out: "FIRE LANE - NO PARKING". There shall be no more than 50' between repetitions and no more than 10', nor less than 4' between "FIRE LANE" and "NO PARKING". Where there is not enough room along a curb for both phrases, "FIRE LANE" shall be used. The top of the letters of each word shall be closest to, and parallel to, the adjacent edge, curb, or line. In most cases both sides of the access shall be marked. Where long drives are to be marked the repetitions may alternate sides of the drive, if in the opinion of the Fire Marshal, effective marking is accomplished.

#### Type 3 – Metal Signs

Approved metal signs stating "NO PARKING-FIRE LANE" or "NO PARKING-THIS SIDE OF STREET" may be required at intervals of 50 to 200-feet on center. Additional locations may be designated by the Fire Marshal. Such signs shall be approximately 12" wide and 18" high and have red letters on a white background. Metal signs shall be installed on 2" by 2", 14 gauge, qwik-punch A.S.T.M. A570 posts per City of Redmond Design and Construction drawing number 426, and M.U.T.C.D. guidelines. Where fire lanes are adjacent to buildings or structures the signs may be placed on the building or structure face when approved or directed by the Fire Marshal. Type 3 (Metal signs) may be used in lieu of Type 2 (pavement lettering) when specifically approved by the Fire Marshal.

#### Type 4 – Edge Striping

Where there is no curb, a nominal 6" yellow stripe shall be painted on the pavement along the edges of the approved fire lane. Pavement lettering or Fire



Lane signage shall be provided as required for Type 1 or Type 2 as designated by the Fire Marshal.

## Type 5 – Diagonal Striping

Specifically designated areas shall require diagonal, painted, striping across the width of the fire lane. Diagonal striping shall be used in conjunction with Type 1 (painted curbs) and/or Type 4 (edge striping), and shall run at an angle of 30 to 60 degrees from one side to the other. These diagonal lines shall be parallel with each other, be a nominal 6" wide and be approximately 24" apart. A blank area shall be maintained under and within 18" of the lettering. Lettering shall occur as with Type 2 marking. Type 3 (Metal signs) may be used in lieu of Type 2 (pavement lettering) when specifically approved by the Fire Marshal.

### Type 6 - Raised Marking

Where fire lanes are constructed level with non-drivable surrounding grades approved raised marking shall be required. Raised marking may consist of plantings, curbs, posts, and/or similar features that provide raised differentiation of the driving surface from the adjoining grade.

### Type 7 – Warning Signs

Where an adjacent or continuing surface is sufficient for some vehicles, but not emergency vehicles, approved warning signs and/or gates as designated by the Fire Marshal shall be required to clearly differentiate the two surfaces.

- 2.1.2.5 Marking of fire lanes shall be maintained as needed to clearly identify the designated area as being a fire lane. Maintenance shall include cleaning, repainting, repairing, removing obstructions and/or pruning plantings from around or over the fire lane, fire lane signs, and/or markings.
- **2.1.2.6** Required Fire Lane Markings:

The following are the **minimum** Fire Lane markings for listed developments:

Single Family Short Plat with 28 foot road Type 3 every 150 lineal feet

Single Family Short Plat with 20 foot road Type 1 or 4, and Type 3 every 150

lineal feet

Single Family Plat with 20 or 28 foot road Type 1 or 4, and Type 3 every 150

lineal feet

Multi-Family / Commercial Type 1 or 4, and Type 2 or

Type 3 as directed

Designated areas of any of the above Type 4,5,6, or 7

Note: In some unique situations additional types may be required

Road widths less than 28 feet are required to mark both sides of the access road as a Fire Lane. Road widths 28 feet to 34 feet shall mark one side of the access drive, and mark the opposite side for parking or a Type 4 marking.

## 2.2: ADDRESSING

**2.2.1; ADDRESSING CONVENTION:** The following standard is a compilation of Redmond Building Division Standards, Redmond Fire Department Standards, and King County grid conventions for addressing.

#### 2.2.1.1; Commercial and Multifamily Addressing:

Commercial and multifamily projects will be designated with one street address per building. Buildings with zero lot lines shall be considered separate and distinct buildings for the purposes of addressing. Detached parking garages, which have



their own fire protection or suppression systems, shall be assigned addresses separate from the building they serve. Parking structures directly attached to multiple buildings that contain their own fire protection or suppression systems, shall be assigned a separate address from the buildings they serve.

Individual residential living units (units) and individual commercial tenant spaces (suites) shall have their own 3 or 4 digit unit or suite number, as approved by the Fire Marshal. All first level units or suites shall begin with a 1 and all second level unit or suites shall begin with a 2. All first level basement units or suites shall begin with a B1, all second level basement units or suites shall begin with a B2. etc. Leading zeros shall not be used to indicate sub grade units. Provisions shall be made to allow for future smaller divisions of the building when assigning suite numbers within a new building. Where subdivision of existing space does not allow for a separate new number within the sequence then an alpha designator may be used with the original unit number (i.e.: 101 divides into 101a and 101b when there is a 100 unit and a 102 unit). Unit and suite numbers shall be sequential and where applicable proceed from left to right, as indicated when facing the building from the addressed side. When there are both interior and exterior units or suites on the same floor they shall be numbered in a logical and sequential manner as approved by the Fire Marshal. When designating suite numbers consideration shall be given to future configurations of the building and appropriate spacing shall be left in the numbering sequence. When buildings have multiple access points from different streets the assigned address shall be posted on, above or adjacent to said access points.

In the case of stacked units the numbering shall be consistent floor to floor. The first digit shall designate the floor and the remaining digits shall be the same vertically as follows:

- Unit 301 would be on the third floor and over unit 201.
- Unit 201 would be on the second floor and over unit 101.
- Unit 101 would be on the first floor

#### 2.2.1.2: Accessory Dwelling units

Accessory dwelling units, whether attached or not, shall be addressed with the same address as the primary dwelling with the addition of a numerical designator. (i.e. 15670 #1 NE 85 Street and 15670 #2 NE 85 Street) Alpha or  $\frac{1}{2}$  designators shall not be used.

## 2.2.1.2; Street Grid Convention:

- **2.2.1.2.1;** "Avenues" are primary grid, through streets that run north and south (\_\_\_\_\_ Avenue N.E.)
- **2.2.1.2.2;** "Streets" are primary grid, through streets that run east and west ( N.E. St. )
- **2.2.1.2.3;** "Places" are non-through, non dead end streets that run north and south & parallel "avenues"
- **2.2.1.2.4;** "Ways" are non-through, non dead end streets that run east and west & parallel "streets"
- **2.2.1.2.5**; "Courts" are dead end streets that run in either north/south or east/west
- **2.2.1.2.6:** "Circle" shall be used only for loop roads that make an entire circle.
- **2.2.1.2.7**; Odd numbered addresses shall be used on the west and south
- **2.2.1.2.8**; Even numbered addresses shall be used on the north and east
- **2.2.1.2.9;** Numbers get larger when going north and east, and shall be consistent with the King County grid.
- **2.2.1.2.10**; Where diagonal streets are proposed they shall be designated as close to the grid as possible and in logical relationship to existing, intersecting "streets" or "avenues"



- **2.2.1.2.11**; Any subdivision with its own interior access street and having more than four lots shall be addressed off of the interior access street
- **2.2.1.2.12**; The owner shall be required to install all necessary or required street signs.
- **2.2.1.2.13:** New named streets may only be used where no buildings or facilities are addressed from it. Such buildings or facilities may be addressed from numbered streets running perpendicular to the named street.
- **2.2.2; ADDRESS SIGNAGE:** Project owners shall be responsible for installation and maintenance of all required site, unit, suite, or directory signs. No additional alpha or numeric designators that obscure or are confusing shall be allowed to be posted on the building other than the approved street address and suite numbers.
  - 2.2.2.1 New Construction, Development, or Major Remodels: One or more approved address signs shall be required for every project. Individual buildings shall have the building address numerals, letters, or series of numerals placed a minimum of 7 feet above finish grade or in most cases on the upper 25% of the building face for buildings two or more stories in height. The signs shall be located in such a position so as to be plainly visible and clearly legible from the street and/or road fronting the property or where applicable, the interior access road. The numbers and/or letters shall contrast in color to their background. When buildings have multiple access points from different streets the assigned address shall be posted on, above or adjacent to said access points.

#### **Minimum** Numeral and Letter Size

Setback from →	< 50'		50' – 100'		>100'	
Street:	Height	Stroke	Height	Stroke	Height	Stroke
Single Family	4"	1/2"	N	N	N	N
Residential						
S.F. driveway/street	4"	1/2"	N	N	N	N
sign						
Multi Family	6"	3/4"	12"	1 ½"	24"	2 ½"
Small Commercial	6"	3/4"	12"	1 ½"	24"	2 ½"
Large Commercial	12"	1 ½"	18"	2"	24"	2 ½"
Monument Sign	6"	3/4"	NA	NA	NA	NA

**N:** Single Family residential, 50 feet or greater from the street, shall have a driveway/street sign, and if the access serves more than one dwelling unit, address signage at the building(s).

- **2.2.2.1.1** Building units or suites shall be clearly differentiated in an ordered and sequential manner and identified per floor. Numerals designating units or suites shall be a minimum of 3 1/2" high and 3/8" stroke. Said numbers shall contrast with their background. Units or suites that do not face the street from which the building is addressed shall post the building address and suite number on, above or adjacent to the access point for the suite.
- **2.2.2.1.2** Multi-story residential unit addresses must be "stacked" to side of stairwell.
- **2.2.2.1.3** Any numbers located on glass surfaces shall have a permanent contrasting background.
- 2.2.2.1.4 Temporary signs shall be used at the job site as soon as construction begins. Numerals shall be high contrast in color, face the street fronting the property, and be a minimum 12" vs. 6" high.
- **2.2.2.1.5** All required signs for addressing shall also meet the City of Redmond Planning Department requirements and when required shall be done under the authority of a valid sign permit.



**2.2.2.2 Existing Situations** If in the opinion of the Fire Department the building address is not clearly legible from the street then the building or tenant shall be required to comply with section 2.2 of this Standard.

## 2.2.3; ADDRESSING PROTOCOLS:

The following protocols shall govern common usage of designators for addressing.









The following is the City of Redmond Address Standards, which conforms to the US Postal Service and the US Bureau of the Census address standards.

Directional	<u>Abbreviations</u>
East	Е
North	N
South	S
West	W
Northeast	NE
Northwest	NW
Southeast	SE
Southwest	SW

Abbreviations for Street Designators						
Alley	ALY	Place	PL			
Avenue	AVE	Plaza	PLZ			
Boulevard	BLVD	Point	PT			
Center	CTR	Ridge	RDG			
Circle	CIR	River	RIV			
Court	CT	Road	RD			
Courts	CTS	Shore	SHR			
Creek	CRK	Shores	SHRS			
Drive	DR	Square	SQ			
Estate	EST	Station	STA			
Freeway	FRY	Street	ST			
Hill	HL	Terrace	TER			
Lake	LK	Valley	VLY			
Lane	LN	Vista	VIS			
Park	PARK	Walk	WALK			
Parkway	PKWY	Way	WAY			



### Secondary Unit Designators

Apartment APT Trailer **TRLR** Building BLDG Unit UNIT Department DEPT Lobby I BBY Floor FL Office OFC **SPC** Room RM Space Suite STE

### **Address Characters**

Capitalize all characters

Omit all punctuation, except the hyphen in the Zip+4 code

Use abbreviations whenever possible

Use the ST, ND, RD, and the TH after the Numerical Street Names (80<sup>TH</sup>, 132<sup>ND</sup>, etc)

All Caps

**NO Commas** 

NO Extra Spaces

NO Hyphens except for the Zip+4 code

## City of Redmond Street Designators

Avondale Road AVONDALE RD
Bellevue-Redmond Road BEL RED RD
Brown Street BROWN ST
Cleveland Street CLEVELEND ST

East Lake Sammamish Parkway E LK SAMMAMISH PKWY

Gilman Street

Leary Way

Union Hill Road

Novelty Hill Road

Old Redmond Road

Redmond-Fall City Road

GILMAN ST

LEARY WAY

UNION HILL RD

NOVELTY HILL RD

OLD REDMOND RD

REDMOND WAY

REDMOND WAY

Redmond-Woodinville Road REDMOND WOODINVILLE RD West Lake Sammamish Parkway W LK SAMMAMISH PKWY

Willows Road WILLOWS RD

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